

# LIBERATION

## INSTRUCTIONS



**DATA EAST CORPORATION**

4-41-10, MINAMI-OGIKUBO, SUGINAMI-KU, TOKYO "167"  
PHONE(03)331-5441 FAX(03)335-3741 TELEX2322124 "DATA J"

БИБЛІОТЕКА

ЗІОЛІВА

КОЛЛЕКЦІЯ

Your mission:

Destroy all prisoner camps and liberate the prisoners.

Shoot down enemy fighters and land your chopper at the heliport.

After landing, use the tank or jeep to search out prisoner camps.

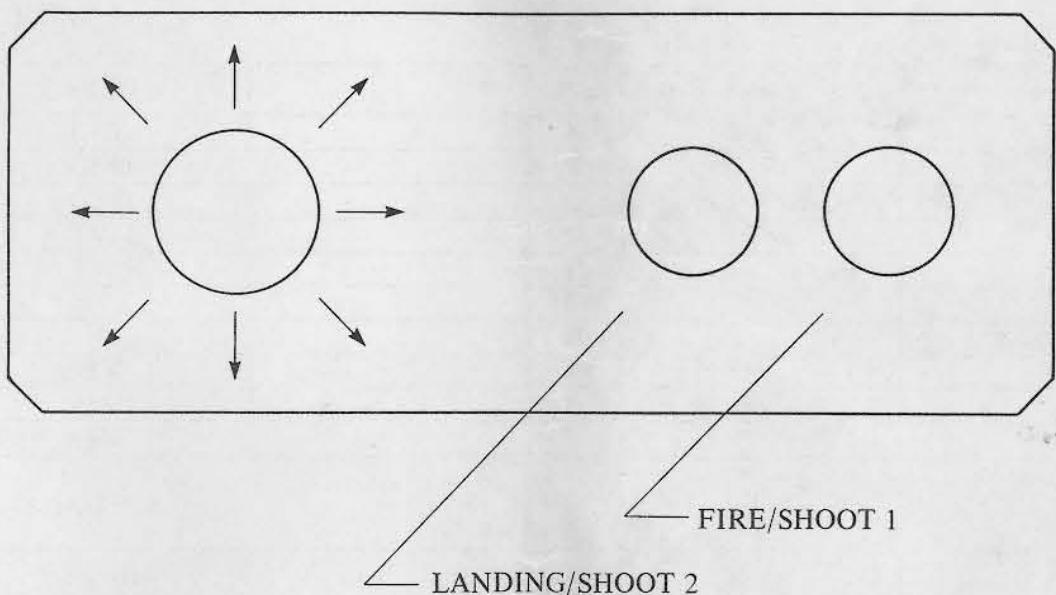
Gun down armored vehicles and use their guns.

Use 8-way joystick for control.

Use red button to shoot.

Use blue button for landing.

#### JOYSTICK CONTROL DIRECTIONS





## 1. HARNESS CONNECTION

1) Terminal Numbering CR7E-36DA-3.96E (HIROSE) 3.96mm Pitch



CR7E-20DA-3.96E (HIROSE) 3.96mm Pitch



2) Signal to Terminal

CR7E-20DA-3.96E

Pin	Signal		Pin	Signal	
1	GND		A	GND	
2	GND		B	GND	
3	GND		C	TV. GND	
4	TV. B		D	SYNC.	
5	TV. R		E	TV. G	
6			F		
7			H		
8	+5V		J	+5V	
9	+5V		K	+5V	
10	+5V		L	+5V	

CR7E-36DA-3.96E

Pin	Signal		Pin	Signal	
1	+12V		A	+12V	
2	+5V		B	+5V	
3	+5V		C	+5V	
4	+5V		D	+5V	
5			E		
6	COIN 1		F	COIN 2	
7	TILT SW.		H	SERVICE	
8	1P		J	2P	
9	1P SHOOT 2		K	2P SHOOT 2	
10	1P SHOOT 1		L	2P SHOOT 1	
11	1P DOWN		M	2P DOWN	
12	1P UP		N	2P UP	
13	1P LEFT		P	2P LEFT	
14	1P RIGHT		R	2P RIGHT	
15	SPEAKER +		S	SPEAKER -	
16	GND		T	GND	
17	GND		U	GND	
18	GND		V	GND	

## 2. POWER SUPPLY

+5V	±2%	4.0A
+12V	±2%	1.0A

## 3. OPERATION ENVIRONMENTS

	Temperature	Humidity
Operation	5 ~ 35°C	20 ~ 80%
Storage	-15 ~ 65°C	10 ~ 90%

## 4. CRT MONITOR

### (1) Color Signals R.G.B. Separate

Black	0 - +2V
Image Signal	+2.5 V +4V

### (2) Synchronize Signal Composite or Horiz/Vert separated.

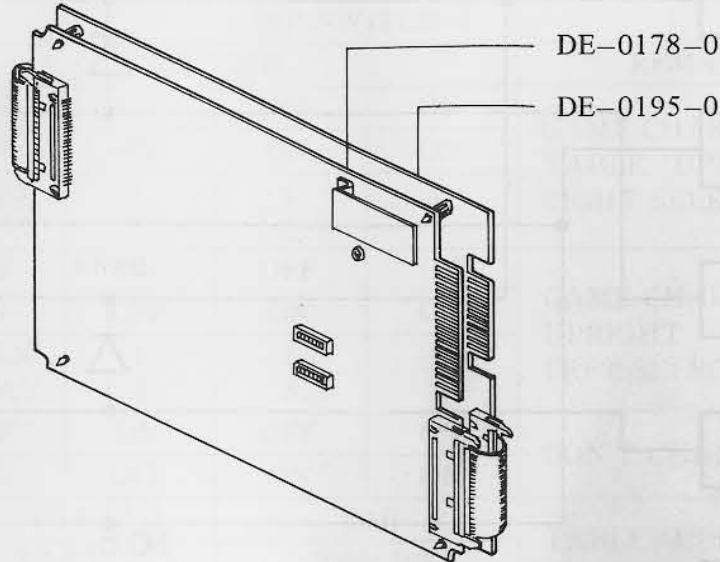
0	0 - 0.5V
1	+3V - +5V

### (3) Screen Image Size

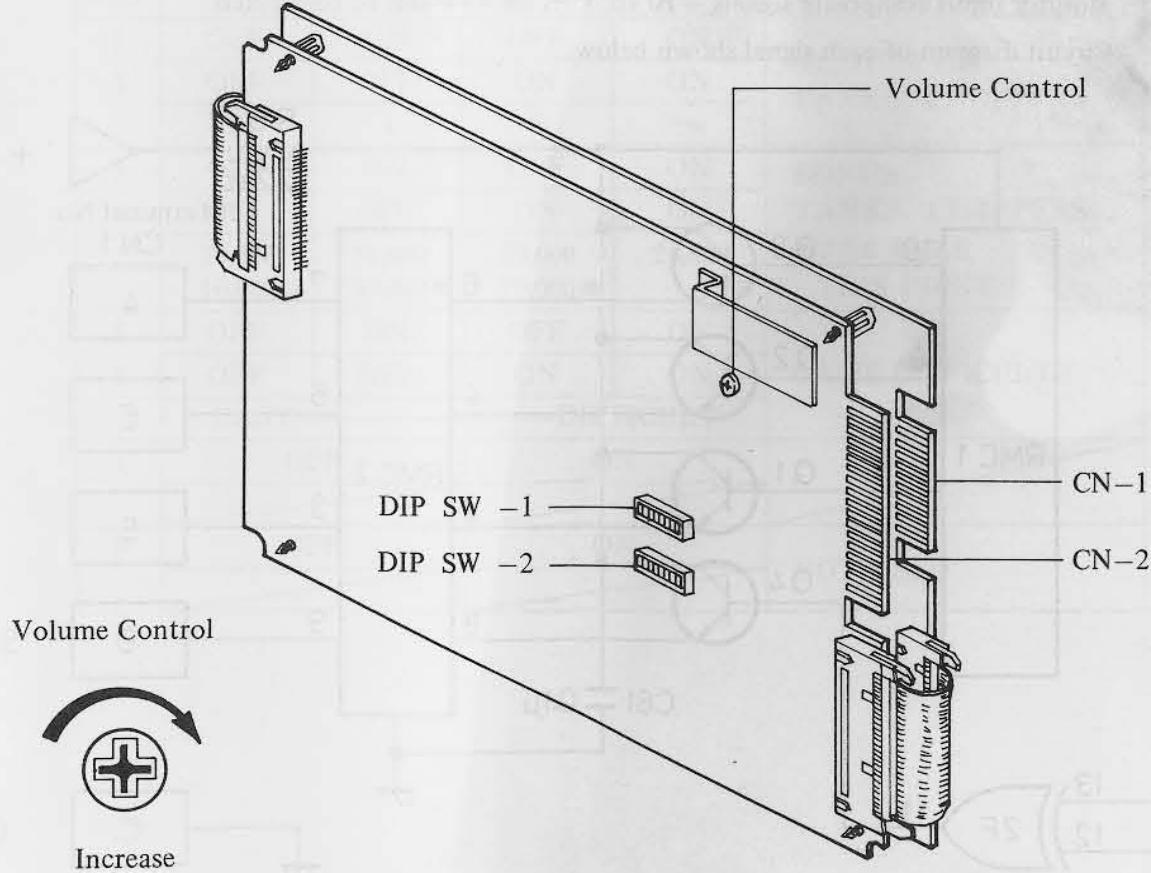
Image can be shrunk both horizontally and vertically by 10%. Adjust monitor to widen the screen image.

## 5. DIMENSION

DE-0178-0 - 230mm x 350mm  
DE-0195-0 - 230mm x 350mm

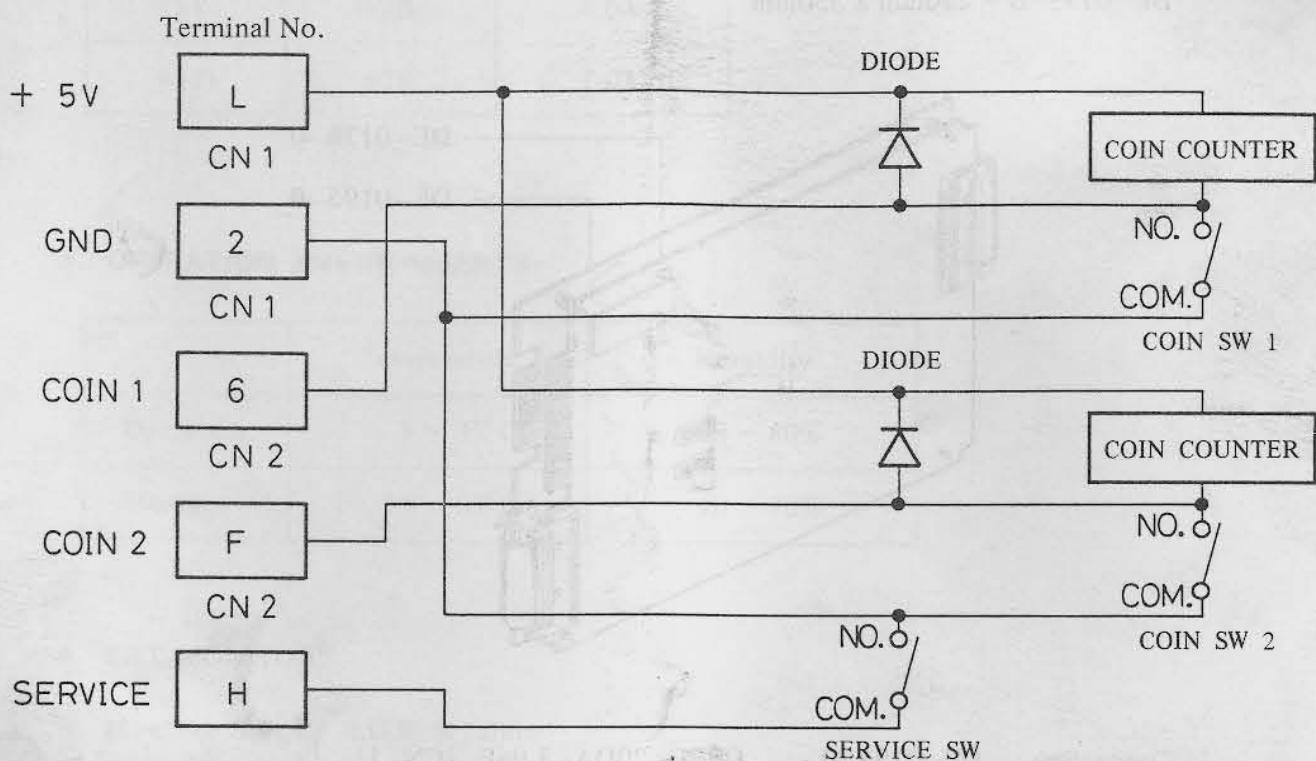


Connectors : DE-0195-0 CR7E-20DA-3.96E [CN-1]  
DE-0178-0 CR7E-36DA-3.96E [CN-2]



## 6. EXAMPLE OF STANDARD CONNECTION

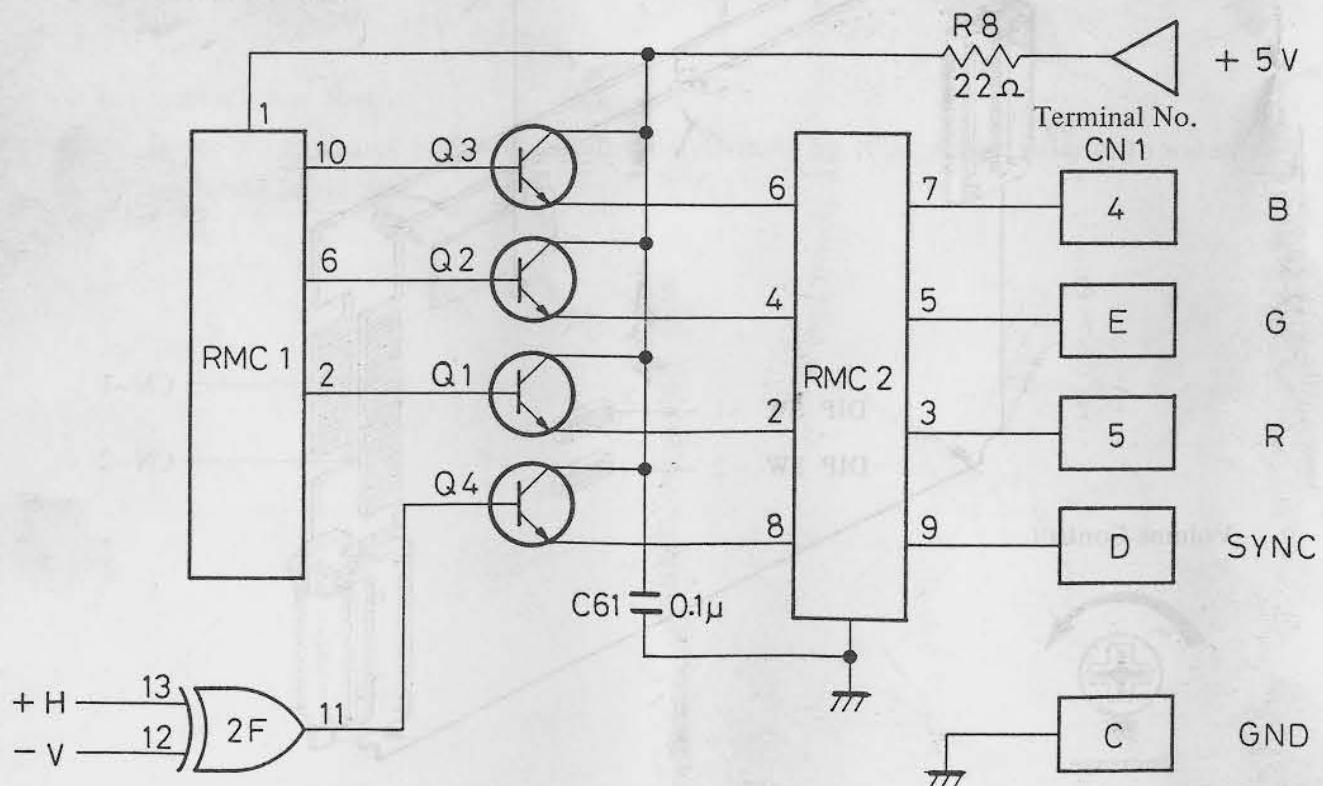
2 coin switches can be installed.



## MONITOR CONNECTION

Monitor input composite signals – Horiz/Vert on +5V can be connected.

Circuit diagram of each signal shown below.



## HOW TO INSTALL

### DIP SWITCH SETTINGS

DIP SWITCH 1				
NO	SETTING			REMARKS
1	OFF	ON	OFF	ON
2	OFF	OFF	ON	ON
3	1 COIN	1	1	2
	1 PLAY	2	3	1
4	OFF	ON	OFF	ON
5	OFF	OFF	ON	ON
	1 COIN	1	1	2
6	1 PLAY	2	3	1
	OFF	ON	OFF	ON
7	OFF		ON	
	TABLE		UPRIGHT	
8	OFF		ON	
	DATA EAST CORP.		USA INC.	

DIP SWITCH 2				
NO	SETTING			REMARKS
1	OFF	ON	OFF	ON
2	OFF	OFF	ON	ON
3	3	4	5	~
	OFF	ON	OFF	ON
	OFF	OFF	ON	ON
4	20,000	30,000	50,000	20,000
	40,000*	50,000*	70,000*	0*
5	OFF	ON	OFF	ON
6	OFF	OFF	ON	ON
	EASY	→ DIFFICULT		
7	OFF		ON	
8	OFF		ON	

